

# Special Issue

## The Application of Statistics in Computational Finance

### Message from the Guest Editors

Uncertainty, chaos and complexity are hallmarks of financial markets everywhere. Over the past 70 years, methods from both statistics and statistical physics have proven invaluable in analyzing, describing and forecasting financial market trends to make sense of uncertainty. The intersection of statistics, operations research and machine learning has provided numerous advances in portfolio optimization and selection, as well as predictive power. The purpose of this Special Issue is to collate articles that reflect the importance of statistics and statistical physics in economics, econometrics and finance. Both theoretical and experimental papers that showcase and advance the use of statistics to compute quantities of interest such as volatility forecasts, descriptive statistics, portfolio weights, and so on, are welcome, both in a univariate or multivariate setting. We would be interested in receiving papers concerning any financial instrument, not limited to equities, fixed income, foreign exchange, options and derivatives, cryptocurrencies.

---

### Guest Editors

Dr. Nick James

School of Mathematics and Statistics, University of Melbourne, Victoria 3010, Australia

Dr. Max Menzies

Beijing Institute of Mathematical Sciences and Applications, Tsinghua University, Beijing 101408, China

---

### Deadline for manuscript submissions

closed (15 December 2023)



## Mathematics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 5.4



[mdpi.com/si/153831](https://mdpi.com/si/153831)

*Mathematics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[mathematics@mdpi.com](mailto:mathematics@mdpi.com)

[mdpi.com/journal/  
mathematics](https://mdpi.com/journal/mathematics)





# Mathematics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 5.4



[mdpi.com/journal/  
mathematics](https://mdpi.com/journal/mathematics)



## About the Journal

### Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

---

### Editor-in-Chief

Prof. Dr. Francisco Chiclana  
School of Computer Science and Informatics, De Montfort University,  
The Gateway, Leicester LE1 9BH, UK

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

#### Journal Rank:

JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.3 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).